

## **Section 2108. Overhaul**

### **2108.01 DESCRIPTION.**

Transport excavated material from roadway and borrow excavation, from channel excavation, and from excavation for structures a distance in excess of the free haul limit for the kind of excavation involved.

### **2108.02 MATERIALS.**

Specified in the contract documents.

### **2108.03 CONSTRUCTION.**

None.

### **2108.04 METHOD OF MEASUREMENT.**

- A.** In determining what constitutes necessary haul, it will be assumed that material taken from excavation will be deposited in embankment after having been hauled the minimum possible distance. The haul distance for material moved from borrow outside the roadway will be measured from the center of mass along the shortest route the Engineer determines to be feasible and satisfactory. The haul distance for material obtained from the roadway, including interchanges and intersections, and placed inside the main roadway will be measured along the center line of the roadway.
- B.** If pavement equipment crossings are designated by the Contractor as provided in [Article 1105.12, B](#), and the contract provides for payment of overhaul on the material involved, overhaul on the material obtained within the roadway will be computed and measured along the center line as described above. Overhaul will be computed and measured on the basis that material taken from excavation was deposited in adjacent embankment after having been hauled the minimum possible distance, irrespective of the number and location of equipment crossings designated by the Contractor. The haul distance for material moved from outside the roadway will be measured along the shortest route the Engineer determines feasible and satisfactory. It will be assumed that an equipment crossing was designated opposite the point where the haul road enters the roadway.
- C.** The limits of free haul will be determined from a mass diagram by fixing two points on the volume curve, one on each side of the neutral grade point. One point is placed in excavation and the other in embankment so that the distance between them equals the free haul distance and the included quantity of excavation and embankment balance. Materials within the free haul limit will be eliminated from further consideration. The distance between the center of gravity of the remaining mass of excavation and the remaining mass of embankment, minus the free haul distance, will be the overhaul distance. The quantity of overhaul will be measured in station yards (station meter). A station yard (station meter) is defined as the product of an overhaul distance of 1 station (metric station) multiplied by 1 cubic yard (cubic meter) of material hauled a distance greater than the free haul distance.
- E.** Unless provided otherwise in the contract documents, the free haul distance will be 1000 feet (300 m).
- F.** Payment for Overhaul will be for quantities shown in the contract documents in conjunction with quantities shown in the contract documents described in [Article 2102.04](#) and under the conditions described therein. If Class 10 excavation quantities are changed, overhaul quantities will also be subject to change. The Engineer will compute the overhaul change if it can be identified. If not, it will be adjusted by the ratio of adjusted quantities to original quantities shown in the contract documents of Class 10 excavation.

### **2108.05 BASIS OF PAYMENT.**

Payment for the quantity of overhaul, measured as provided above, will be the contract unit price per station yard (station meter) with the following exceptions:

- A.** Overhaul will not be paid for selected backfill material if it can be secured and used as shown in the contract documents. Should changes from the contract documents cause an increase or decrease in necessary haul, payment will be adjusted for such increase or decrease at the contract unit price per station yard (station meter).

- B.** If no bid price appears in the contract for overhaul, increased overhaul will be paid for at a unit price agreed to by the Contractor and Engineer, but not to exceed \$0.02 per station yard (\$0.09 per station meter).